

CLASSIFICATION:

**UNCLASSIFIED**

EXHIBIT R-2, RDT&E Budget Item Justification							DATE:			
							February 2002			
APPROPRIATION/BUDGET ACTIVITY					R-1 ITEM NOMENCLATURE					
RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY/BA 6					Management, Technical and International Support/0605853N					
COST (\$ in Millions)		FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY2007	Cost to Complete	Total Cost
Total PE Cost		18.579	27.413	50.787	33.618	34.377	35.975	37.215	Cont.	Cont.
S3039 CHENG		0.000	11.561	33.063	15.367	15.746	16.964	17.793	Cont.	Cont.
R0149 International Cooperative RDT&E		1.876	1.723	1.903	1.937	2.027	2.071	2.115	Cont.	Cont.
R1767 Naval War College/Center for Naval Warfare Studies		2.484	2.633	3.021	3.086	3.138	3.196	3.253	Cont.	Cont.
X2221 Assessment Program		14.219	11.496	12.800	13.228	13.466	13.744	14.054	Cont.	Cont.
Quantity of RDT&E Articles		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
A. (U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This Program Element provides management and technical support for several national and international projects:										
(U) Project S3039 provides the Assistant Secretary of the Navy, Research Development and Acquisition (ASN (RDA)) the engineering base and senior leadership focus within the acquisition structure for integration and interoperability across all Navy and Marine Corps Program Executive Offices (PEO's), Program Managers (PMs), and System Commands (SYSCOMs). This program addresses integration and interoperability of current and future combat, weapons, and command, control, communications, computer and intelligence (C4I) systems acquired by the DoN. Representative engineering activities provided by the Chief Engineer (CHENG) include: leading the functional design of combat and C4I system functions with respect to overall warfare operational architectures, approval of system level interface specifications for all referenced systems; assessing and approving interface changes that impact interoperability prior to fleet introduction; assuring that individual systems adhere to the resulting configuration; providing centralized Naval input to Office of the Undersecretary of Defense, Science and Technology (OUSD (S&T)) on matters related to software intensive systems; and establishing the technical basis for recommended investment decisions and program priorities to ASN (RDA) and the appropriate service chief concerning fielding systems and planned future counterparts. This program develops the Naval Collaborative Engineering Environment as the primary means to support information sharing and decision analyses, interactive analyses of system design alternatives, and data management and configuration control between Navy Laboratories, test facilities and industry engineering teams.										
(U) Project R0149 provides program management, execution, and support to implement a broad range of cooperative naval research and development (R&D) initiatives with allied and friendly nations. Potential cooperative programs are pursued to fulfill established operational requirements, enhance U.S./allied interoperability and standardization, obtain unique foreign technologies, and reduce U.S. developmental and production costs.										
(U) Project R1767 provides funding for Naval War College (NWC) research activities, which serve as a focal point, stimulus, and major source of strategic and campaign thought within the Navy. These efforts generate strategy and campaign alternatives, provide for evaluation through war-gaming methodologies, and provide recommendations to the Chief of Naval Operations (CNO) and fleet commanders regarding the formulation and execution of strategy.										
(U) Project X2221 provides analytical and management support for the Planning/Assessment process. This project supports the development of annual Integrated Warfare Architectures (IWARS)/Chief of Naval Operations Program Assessment Memorandum (CPAM)/Joint Warfighting Capability assessments which provide the analytical underpinnings and basis for programmatic decisions made by the Navy's top leadership regarding integration of Navy warfare/support requirements.										

R-1 SHOPPING LIST - Item No.158-1 of 158-13

**Exhibit R-2, RDT&E Budget Item Justification**  
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EXHIBIT R-2, RDT&E Budget Item Justification		DATE: <b>February 2002</b>	
APPROPRIATION/BUDGET ACTIVITY <b>RESEARCH DEVELOPMENT TEST &amp; EVALUATION, NAVY/BA 6</b>		R-1 ITEM NOMENCLATURE <b>Management, Technical and International Support/0605853N</b>	
 B. (U) Program Change Summary:			
	FY 2001	FY 2002	FY 2003
(U) FY 2002 President's Budget:	17.481	21.628	0.000
(U) Appropriated Value:	17.644	18.628	
(U) Adjustments to FY 2001/2002 Appropriated Value/ FY 2002 President's Budget:	0.935	8.785	
(U) FY 2003 President's Budget Submit	18.579	27.413	50.787
 Funding:			
FY 2001: Program Adjustments (+\$1.602), SBIR Assessment (-\$.315), and minor pricing adjustments of (-\$.352)			
FY 2002: Transfer of funds from O&MN (+\$12.075), Program Assessment (-\$3.000), and Minor Pricing Adjustments (-\$.290)			

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**Exhibit R-2, RDT&E Budget Item Justification**  
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EXHIBIT R-2a, RDT&E Budget Item Justification							DATE: <b>February 2002</b>			
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N BA-6</b>		PROGRAM ELEMENT NUMBER AND NAME 0605853N/Management, Technical and International Spt			PROJECT NUMBER AND NAME S3039 CHENG					
COST (\$ in Millions)		FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Project Cost		<b>0</b>	<b>11.561</b>	<b>33.063</b>	<b>15.367</b>	<b>15.746</b>	<b>16.964</b>	<b>17.793</b>	<b>Cont.</b>	<b>Cont.</b>
RDT&E Articles Qty										
<p>A. (U) Mission Description and Budget Item Justification</p> <p>Mission: This project provides for ASN (RDA) identification and resolution of integration and interoperability issues across all Navy and Marine Corps programs early in the acquisition process. The Chief Engineer provides the engineering base and leads the system engineering activities that address the significant challenges posed by the increasingly complex warfighting capabilities of new systems and their integration with in-service systems on ships, submarine, aircraft, satellite, and land facilities and units.</p> <ul style="list-style-type: none"> <li>-(U) Define Mission Capability Packages (MCPs) from a system-of-system perspective to collectively achieve or exploit warfighting capabilities.</li> <li>-(U) Lead the functional allocation of combat and C4I system functions, and the definition and control of critical interfaces between component systems within a MCP.</li> <li>-(U) Develop the overall performance requirements and the data flow, control flow, and error budgets, and time latencies required to achieve desired MCP capability/effectiveness.</li> <li>-(U) Assess the risk of achieving the capabilities/effectiveness introduced by technical and programmatic changes to MCP programs during their execution.</li> <li>-(U) Research the underlying technical issues and related technologies that enable the development of needed standards, policies and guidelines to address root impediments to integration and interoperability.</li> <li>-(U) Develop the Naval Collaborative Engineering Environment to enable efficient and interactive integration and interoperability engineering design and implementation throughout the Naval acquisition community by networking DON laboratory capabilities and test facilities to support information sharing and decision analysis, interactive analysis of design alternatives, and data management and configuration control of approved requirements.</li> <li>-(U) Implement the Navy Single Integrated Air Picture (SIAP) Systems Engineering for the Joint Task Force to identify and recommend the most effective and efficient means to achieve a SIAP capability that satisfies warfighter needs.</li> </ul> <p>(U) PROGRAM ACCOMPLISHMENTS AND PLANS:</p> <p>(U) FY 2001 ACCOMPLISHMENTS: N/A</p>										

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**Exhibit R-2a, RDT&E Budget Item Justification**  
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APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N BA-6</b>	PROGRAM ELEMENT NUMBER AND NAME 0605853N/Management, Technical and International Spt	PROJECT NUMBER AND NAME S3039 CHENG
<p>(U) FY 2001 ACCOMPLISHMENTS: Not applicable.</p> <p>(U) FY 2002 PLAN:</p> <ul style="list-style-type: none"><li>- (U) (\$2.246) Architecture Development. Conduct functional analyses for six POM 04 Mission Capability Packages (MCPs): Time Critical Targeting (TST); Theater Air and Missile Defense (TAMD), Anti-Submarine Warfare (ASW); Battle Management Command and Control (BFC<sup>2</sup>); Information, Surveillance and Reconnaissance (ISR); and Navigation. Develop system and technical architectures that describe the physical, functional and organizational relationships among systems/programs within each MCP. Assess and benchmark each MCP architecture to support POM 04 decisions.</li><li>- (U) (\$2.723) Large Scale Systems Engineering Processes. Conduct MCP performance assessments: TST, TAMD, and Undersea Warfare (USW) element of ASW. Develop the knowledge base required to support integration and interoperability risk assessments of TST, TAMD, and USW systems including a working definition of interoperability metrics and operational analysis processes to relate these metrics to warfighting costs and operational performance.</li><li>- (U) (\$1.686) Naval Collaborative Engineering Environment. Develop the decision support capability to support development of the POM 04 MCPs. Prototype and demonstrate the engineering environment and related integrated databases for TST, TAMD, and USW systems.</li><li>- (U) (\$.906) Standards Policies and Guidelines. Develop and implement integration and implementation acquisition policy and standards, e.g. Risk Advisory Board (RAB), Joint Technical Architecture (JTA), Defense Integration and Interoperability Common Operational Environment (DII COE), Anti-Tamper.</li><li>- (U) (\$1.137) Mission Area Coordinator. Coordinate integration and implementation priorities and issue resolution with OPNAV and Fleet Representatives.</li><li>- (U) (\$2.863) Core. Provide engineering and technical staff to direct integration and interoperability priorities across Navy and Marine Corps Systems Commands, laboratories, and field activities.</li></ul>		

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**Exhibit R-2a, RDT&E Budget Item Justification**  
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EXHIBIT R-2a, RDT&E Budget Item Justification			DATE: <b>February 2002</b>																																	
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N BA-6</b>	PROGRAM ELEMENT NUMBER AND NAME 0605853N/Management, Technical and International Spt	PROJECT NUMBER AND NAME S3039 CHENG																																		
<p>(U) FY2003 PLAN:</p> <ul style="list-style-type: none"> <li>- (U) (\$10.300) Architecture Development. Complete and refine architectures for MCPs developed in FY 02 to reflect POM 04 decisions. Perform architecture assessments to support PR 05 issues.</li> <li>- (U) (\$3.800) Large Scale Systems Engineering Processes. Re-validate TCT, TAMD, and USW MCP performance assessment to reflect POM 04 decisions. Continue development of the knowledge base for TCT, TAMD, and USW systems. Conduct risk assessments for ASN(RDA) metric reviews and PR 05 issue development.</li> <li>- (U) (\$2.300) Naval Collaborative Engineering Environment (NCEE). Complete the prototype demonstration of NCEE capabilities for TCT, TAMD, and USW systems. Initiate the extension to the BFC<sup>2</sup>, ISR and Navigation (NAV) MCPs.</li> <li>- (U) (\$1.000) Standards Policies and Guidelines. Develop and implement integration and interoperability acquisition policy and standards, e.g. RAB, JTA, DII COE, Anti-Tamper.</li> <li>- (U) (\$1.500) Mission Area Coordinator. Coordinate integration and interoperability priorities and issue resolution with OPNAV and Fleet Representatives.</li> <li>- (U) (\$3.163) Core. Provide engineering and technical staff to direct integration and interoperability priorities across Navy and Marine Corps Systems Commands, laboratories, and field activities.</li> <li>- (U) (\$11.000) SIAP. Provide subject matter experts for SIAP BLK 1 system engineering issues, cost/benefit, analysis, metrics development and lessons learned. Develop proposals for engineering solutions, validate cost estimates, and provide Modeling and Simulation and Independent Verification and Validation support.</li> </ul>																																				
<p>B. (U) OTHER PROGRAM FUNDING SUMMARY: (Dollars in Millions)</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 35%;"></th> <th style="width: 10%;">FY01</th> <th style="width: 10%;">FY02</th> <th style="width: 10%;">FY03</th> <th style="width: 10%;">FY04</th> <th style="width: 10%;">FY05</th> <th style="width: 10%;">FY06</th> <th style="width: 10%;">FY07</th> </tr> </thead> <tbody> <tr> <td>O&amp;MN</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td>PE0708012N/0701113N 1C6C</td> <td>16.702</td><td>2.785</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td> </tr> <tr> <td>PE0702096N 4B2N</td> <td>0</td><td>1.000</td><td>1.020</td><td>1.040</td><td>1.060</td><td>1.082</td><td>1.100</td> </tr> </tbody> </table>						FY01	FY02	FY03	FY04	FY05	FY06	FY07	O&MN								PE0708012N/0701113N 1C6C	16.702	2.785	0	0	0	0	0	PE0702096N 4B2N	0	1.000	1.020	1.040	1.060	1.082	1.100
	FY01	FY02	FY03	FY04	FY05	FY06	FY07																													
O&MN																																				
PE0708012N/0701113N 1C6C	16.702	2.785	0	0	0	0	0																													
PE0702096N 4B2N	0	1.000	1.020	1.040	1.060	1.082	1.100																													
<p>C. (U) ACQUISITION STRATEGY: Not Applicable</p>																																				
<p>D. (U) SCHEDULE PROFILE: Not Applicable.</p>																																				

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**Exhibit R-2a, RDT&E Budget Item Justification**  
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Exhibit R-3 Cost Analysis (page 1)							DATE: February 2002					
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NAME AND NUMBER						
RDT&E, N/BA-6			0605853N			Management, Technical and International Support/0605853N-S3039 CHENG						
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date	FY 03 Cost	FY 03 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Architecture Definition	Contract	JHU/APL	0.000	0.000		0.085	01/02	0.125	11/02	CONT	CONT	TBD
Architecture Definition	RCP	CNO/C N A	0.000	0.000		0.101	01/02	0.125	11/02	CONT	CONT	TBD
Architecture Definition	WR	NAWC		0.000		0.205	12/01	0.350	10/02	CONT	CONT	
Architecture Definition	WR	NRL		0.000		0.025	12/01	0.025	10/02	CONT	CONT	
Architecture Definition	WR	NSWC/DD	0.000	0.000		0.076	12/01	0.350	10/02	CONT	CONT	TBD
Architecture Definition	Various	SPAWAR		0.000		0.421	12/01	0.525	10/02	CONT	CONT	
Architecture Definition	Various	Lead Lab		0.000		0.225	01/02	0.355	11/02	CONT	CONT	
Architecture Definition	WR	MCSC		0.000		0.095	12/01	0.125	10/02	CONT	CONT	
Architecture Definition	Contract	Booz-Allen		0.000		0.263	01/02	0.375	11/02	CONT	CONT	
Architecture Definition	Contract	SAIC		0.000		0.320	01/02	0.400	11/02	CONT	CONT	
Architecture Definition	Contract	BAE		0.000		0.264	01/02	0.320	11/02	CONT	CONT	
Architecture Definition	Contract	Logicon	0.000	0.000		0.166	01/02	0.225	11/02	CONT	CONT	
Architecture Definition	Various	Various		0.000		0.000		7.000	10/02	CONT	CONT	
Large Scale Systems Engineering	Contract	JHU/APL	0.000	0.000		0.595	01/02	0.500	11/02	CONT	CONT	TBD
Large Scale Systems Engineering	RCP	CNO/C N A	0.000	0.000		0.295	12/01	0.395	11/02	CONT	CONT	
Large Scale Systems Engineering	WR	MCSC	0.000	0.000		0.100	12/01	0.150	10/02	CONT	CONT	
Large Scale Systems Engineering	WR	NAWC	0.000	0.000		0.680	12/01	0.800	10/02	CONT	CONT	
Large Scale Systems Engineering	WR	NSWC/DD	0.000	0.000		0.274	12/01	0.550	10/02	CONT	CONT	
Large Scale Systems Engineering	Various	SPAWAR	0.000	0.000		0.538	12/01	0.950	10/02	CONT	CONT	TBD
Large Scale Systems Engineering	Various	Lead Lab	0.000	0.000		0.241	01/02	0.455	11/02	CONT	CONT	TBD
Naval Collaborative Eng Eviron	Contract	JHU/APL	0.000	0.000		0.290	01/02	0.400	11/02	CONT	CONT	TBD
Naval Collaborative Eng Eviron	WR	NAWC	0.000	0.000		0.223	12/01	0.256	10/02	CONT	CONT	TBD
Naval Collaborative Eng Eviron	WR	NSWC/DD	0.000	0.000		0.379	12/01	0.604	10/02	CONT	CONT	TBD
Naval Collaborative Eng Eviron	WR	NSWC/PHD Dam Neck	0.000	0.000		0.086	12/01	0.100	10/02	CONT	CONT	
Naval Collaborative Eng Eviron	WR	NUWC/N	0.000	0.000		0.134	12/01	0.150	10/02	CONT	CONT	TBD
Naval Collaborative Eng Eviron	Various	SPAWAR	0.000	0.000		0.265	12/01	0.350	10/02	CONT	CONT	
Naval Collaborative Eng Eviron	Contract	ANTEON	0.000	0.000		0.154	01/02	0.200	11/02	CONT	CONT	
Naval Collaborative Eng Eviron	Contract	BAE	0.000	0.000		0.155	01/02	0.240	11/02	CONT	CONT	
Subtotal Product Development			0.000	0.000		6.655		16.400		CONT	CONT	
Remarks:												

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Exhibit R-3, Project Cost Analysis  
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Exhibit R-3 Cost Analysis (page 1)								DATE:				
February 2002												
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NAME AND NUMBER						
RDT&E, N/BA-6			0605853N			Management, Technical and International Support/0605853N-S3039 CHENG						
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date	FY 03 Cost	FY 03 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Standards, Policy and Guidelines	WR	MCSC	0.000	0.000		0.065	01/02	0.075	10/02	CONT	CONT	TBD
Standards, Policy and Guidelines	WR	NAWC/CL	0.000	0.000		0.065	12/01	0.075	10/02	CONT	CONT	TBD
Standards, Policy and Guidelines	WR	NSWC/DD	0.000	0.000		0.065	12/01	0.075	10/02	CONT	CONT	TBD
Standards, Policy and Guidelines	WR	NUWC/N	0.000	0.000		0.065	12/01	0.070	10/02	CONT	CONT	TBD
Standards, Policy and Guidelines	Contract	ONR/BMPCOE	0.000	0.000		0.165	01/02	0.165	11/02	CONT	CONT	TBD
Standards, Policy and Guidelines	Various	SPAWAR	0.000	0.000		0.233	12/01	0.250	10/02	CONT	CONT	TBD
Standards, Policy and Guidelines	Contract	ANTEON	0.000	0.000		0.158	01/02	0.190	11/02	CONT	CONT	TBD
Standards, Policy and Guidelines	Contract	Northrup Grumman	0.000	0.000		0.090	01/02	0.100	11/02	CONT	CONT	TBD
Mission Area Coordinator	Contract	JHU/APL	0.000	0.000			01/02		11/02	CONT	CONT	TBD
Mission Area Coordinator	WR	MCSC	0.000	0.000		0.000	12/01	0.025	10/02	CONT	CONT	TBD
Mission Area Coordinator	WR	NAWC/CL	0.000	0.000		0.234	12/01	0.285	10/02	CONT	CONT	TBD
Mission Area Coordinator	WR	NSWC/DD	0.000	0.000		0.080	12/01	0.100	10/02	CONT	CONT	TBD
Mission Area Coordinator	WR	NUWC/N	0.000	0.000		0.100	12/01	0.150	10/02	CONT	CONT	TBD
Mission Area Coordinator	WR	NUWC/PC	0.000	0.000		0.050	12/01	0.060	10/02	CONT	CONT	TBD
Mission Area Coordinator	Various	SPAWAR	0.000	0.000		0.050	12/01	0.075	10/02	CONT	CONT	TBD
Mission Area Coordinator	Contract	ANTEON	0.000	0.000		0.362	01/02	0.440	11/02	CONT	CONT	TBD
Mission Area Coordinator	Various	Lead Lab	0.000	0.000		0.125	01/02	0.125	11/02	CONT	CONT	TBD
Mission Area Coordinator	Contract	WBB	0.000	0.000		0.136	01/02	0.240	11/02	CONT	CONT	TBD
CORE	Contract	MIT/LL	0.000	0.000		0.165	01/02	0.245	11/02	CONT	CONT	TBD
CORE	WR	NSWC/DD	0.000	0.000		0.450	12/01	0.760	10/02	CONT	CONT	TBD
CORE	WR	NSWC/PHD Dam Neck	0.000	0.000		0.150	12/01	0.210	10/02	CONT	CONT	TBD
CORE	Contract	ANTEON	0.000	0.000		0.475	01/02	0.450	11/02	CONT	CONT	TBD
CORE	Contract	Booz-Allen, Hamilton	0.000	0.000		0.057	01/02	0.075	11/02	CONT	CONT	TBD
CORE	Contract	BAE	0.000	0.000		0.385	01/02	0.350	11/02	CONT	CONT	TBD
CORE	Contract	Strategic Insights	0.000	0.000		0.300	01/02	0.300	11/02	CONT	CONT	TBD
CORE	Contract	Troy	0.000	0.000		0.170	01/02	0.200	11/02	CONT	CONT	TBD
CORE	Various	Lead Lab	0.000	0.000		0.711	01/02	0.573	11/02	CONT	CONT	TBD
Single Ingegrated Air Picture	Various	Various	0.000	0.000		0.000		11.000	10/02	CONT	CONT	
Subtotal Product Development			0	0		4.906		16.663		CONT	CONT	
Remarks:												
Total Cost			0.000	0.000		11.561		33.063		CONT	CONT	

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Exhibit R-3, Project Cost Analysis  
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EXHIBIT R-2a, RDT&E Budget Item Justification							DATE: <b>February 2002</b>			
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME				PROJECT NUMBER AND NAME					
<b>RDT&amp;E, N BA-6</b>	0605853N/Management, Technical and International Spt				R0149 International Cooperative R&D					
COST (\$ in Millions)		FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Project Cost		<b>1.876</b>	<b>1.723</b>	<b>1.903</b>	<b>1.937</b>	<b>2.027</b>	<b>2.071</b>	<b>2.115</b>	<b>Cont.</b>	<b>Cont.</b>
RDT&E Articles Qty										
<p>A. (U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This project provides program management, execution, and support to implement a broad range of cooperative naval research and development (R&amp;D) initiatives with allied and friendly nations. Potential cooperative programs are pursued to fulfill established operational requirements, enhance U.S./allied interoperability and standardization, obtain unique foreign technologies, and reduce U.S. developmental and production costs. Such efforts result in:</p> <ul style="list-style-type: none"> <li>- (U) Development and negotiation of approximately 25 International RDT&amp;E Agreements annually with allied and friendly nations.</li> <li>- (U) Execution of over 300-information exchange annexes.</li> <li>- (U) Participation in armaments cooperation including the Conference of NATO Armaments Directors groups (e.g., the NATO Naval Armaments Group), Senior National Representative (SNR) meetings, the Technical Cooperative Program and Scientific Committee National Representatives meetings.</li> <li>-(U) Participation in the Engineering and Scientist Exchange Program (ESEP).</li> </ul> <p>(U) PROGRAM ACCOMPLISHMENTS AND PLANS:</p> <p>(U) FY 2001 ACCOMPLISHMENTS:</p> <ul style="list-style-type: none"> <li>- (U) (\$0.391) Continued to support DoN participation at SNR Conferences with allies for harmonization of requirements and identification of potential collaborative R&amp;D projects.</li> <li>- (U) (\$0.889) Continued to support DoN participation in U.S./allied data exchange conferences to identify foreign technologies and R&amp;D projects in which the Navy may desire to collaborate, as well as on-going efforts to initiate/revise/terminate Data Exchange Agreements DEAs to target new technologies and expand, where appropriate, to include exchanges with Former Soviet Union (FSU) countries.</li> <li>- (U) (\$0.409) Continued to update and maintain the DoN data bases for drafting, negotiating, managing and tracking of proposed IAs for "high leverage/high payoff" R&amp;D technology base cooperative projects with key allies and friendly nations. Provided support to Acquisition Integrated Product Teams (IPTs) in evaluating international cooperative alternatives in development of DON programs as well as support to the Office of Secretary of Defense (OSD) International Cooperative Opportunities Group (ICOGs) regarding DON requirements and initiatives.</li> <li>- (U) (\$0.187) Navy participation in the ESEP at approximately two scientists/engineers. Continued to conduct post-assignment analysis of scientists/engineers to better target assignments with emerging technologies and programs at foreign research establishments.</li> </ul>										

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**Exhibit R-2a, RDT&E Budget Item Justification**  
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EXHIBIT R-2a, RDT&E Budget Item Justification		DATE:																								
		<b>February 2002</b>																								
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME																								
<b>RDT&amp;E, N BA-6</b>	0605853N/Management, Technical and International Spt	R0149 International Cooperative R&D																								
<p>(U) FY 2002 PLAN:</p> <ul style="list-style-type: none"> <li>- (U) (\$0.377) Continue to support DoN participation at SNR Conferences with allies for harmonization of requirements and identification of potential collaborative R&amp;D projects.</li> <li>- (U) (\$0.784) Continue to support DoN participation in U.S./allied data exchange conferences to identify foreign technologies and R&amp;D projects in which the Navy may desire to collaborate as well as on-going efforts to initiate/revise/terminate DEAs to target new technologies and expand, where appropriate, to include exchanges with FSU countries.</li> <li>- (U) (\$0.472) Continue to update and maintain the DoN data bases for drafting, negotiating, managing and tracking of proposed IAs for "high leverage/high payoff" R&amp;D technology base cooperative projects with key allies and friendly nations. Provide support to Acquisition IPTs in evaluating international cooperative alternatives in development of DON programs as well as support to OSD ICOGs regarding DON requirements and initiatives.</li> <li>- (U) (\$0.090) Increase the level of Navy participation in the ESEP at approximately four scientists/engineers. Continue to conduct post-assignment analysis of scientists/engineers to better target assignments with emerging technologies and programs at foreign research establishments.</li> </ul> <p>(U) FY 2003 PLAN:</p> <ul style="list-style-type: none"> <li>- (U) (\$0.423) Continue to support DoN participation at SNR Conferences with allies for harmonization of requirements and identification of potential collaborative R&amp;D projects.</li> <li>- (U) (\$0.875) Continue to support DoN participation in U.S./allied data exchange conferences to identify foreign technologies and R&amp;D projects in which the Navy may desire to collaborate as well as on-going efforts to initiate/revise/terminate DEAs to target new technologies and expand, where appropriate, to include exchanges with FSU countries.</li> <li>- (U) (\$0.515) Continue to update and maintain the DoN databases for drafting, negotiating, managing, and tracking of proposed IAs for "high leverage/high payoff" R&amp;D technology base cooperative projects with key allies and friendly nations. Provide support to Acquisition IPTs in evaluating international cooperative alternatives in development of DoN programs as well as support to OSD International Cooperative Opportunities Group (ICOGs) regarding DoN requirements and initiatives.</li> <li>- (U) (\$0.090) Maintain a level of Navy participation in the ESEP at approximately two scientists/engineers. Continued to conduct post-assignment analysis of scientists/engineers to better target assignments with emerging technologies and programs at foreign research establishments.</li> </ul> <p>B. (U) OTHER PROGRAM FUNDING SUMMARY: (Dollars in Millions)</p> <p>(U) RELATED RDT&amp;E:</p> <table> <thead> <tr> <th></th> <th><u>FY 2001</u></th> <th><u>FY 2002</u></th> <th><u>FY 2003</u></th> <th><u>FY 2004</u></th> <th><u>FY 2005</u></th> <th><u>DY 2006</u></th> <th><u>FY 2007</u></th> </tr> </thead> <tbody> <tr> <td>(U) PE 0605130D (Foreign Comparative Testing)</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>(U) PE 0603790N (NATO Cooperative Research and Development)</td> <td>8.620</td> <td>11.449</td> <td>11.581</td> <td>11.804</td> <td>12.276</td> <td>12.512</td> <td>12.760</td> </tr> </tbody> </table> <p>C. (U) ACQUISITION STRATEGY: Not applicable</p> <p>D. (U) SCHEDULE PROFILE: Not applicable</p>				<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>DY 2006</u>	<u>FY 2007</u>	(U) PE 0605130D (Foreign Comparative Testing)								(U) PE 0603790N (NATO Cooperative Research and Development)	8.620	11.449	11.581	11.804	12.276	12.512	12.760
	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>DY 2006</u>	<u>FY 2007</u>																			
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EXHIBIT R-2a, RDT&E Budget Item Justification							DATE: <b>February 2002</b>			
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME				PROJECT NUMBER AND NAME					
<b>RDT&amp;E, N BA-6</b>	0605853N/Management, Technical and International Spt				R1767 Naval War College/Center for Naval Warfare Studies					
COST (\$ in Millions)		FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Project Cost		<b>2.484</b>	<b>2.633</b>	<b>3.021</b>	<b>3.086</b>	<b>3.138</b>	<b>3.196</b>	<b>3.253</b>	<b>Cont.</b>	<b>Cont.</b>
RDT&E Articles Qty										
<p>A. (U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: Naval War College (NWC) research activities serve as a focal point, stimulus, and major source of strategic and campaign thought within the Navy. These efforts generate strategy and campaign alternatives, provide for evaluation through war-gaming methodologies, and provide recommendations to the Chief of Naval Operations (CNO) and fleet commanders regarding the formulation and execution of strategy.</p> <p>(U) PROGRAM ACCOMPLISHMENTS AND PLANS:</p> <p>(U) FY 2001 ACCOMPLISHMENTS:</p> <ul style="list-style-type: none"> <li>- (U) (\$1.600) Conducted strategic studies in response to SECNAV, CNO, UNIFIED, and Fleet CINC tasking in such areas as maritime strategy, decision support, and direct fleet support.</li> <li>- (U) (\$0.768) Conducted major war games culminating in Global '01.</li> <li>- (U) (\$0.116) Provided for selected NWC students to conduct advanced research projects, including expanded opportunities for advanced research under the Mahan Scholars program.</li> </ul> <p>2. (U) FY 2002 PLAN:</p> <ul style="list-style-type: none"> <li>- (U) (\$1.731) Conduct strategic studies in response to SECNAV, CNO, UNIFIED, and Fleet CINC tasking in such areas as maritime strategy, decision support, and direct fleet support.</li> <li>- (U) (\$0.784) Conduct major war games culminating in annual Global War game, including maintenance of legacy Enhanced Naval War gaming System and preparation for implementation of successor Joint Simulation System-Maritime, preparation for implementation of successor Joint Simulation System-Maritime.</li> <li>- (U) (\$0.118) Provide for selected NWC students to conduct advanced research projects.</li> </ul> <p>3. (U) FY 2003 PLAN:</p> <ul style="list-style-type: none"> <li>- (U) (\$1.764) Conduct strategic studies in response to SECNAV, CNO, UNIFIED, and Fleet CINC tasking in such areas as maritime strategy, decision support, and direct fleet support.</li> <li>- (U) (\$1.137) Conduct major war games culminating in annual Global War game, including maintenance of legacy Enhanced Naval Wargaming System, preparation for implementation of successor Joint Simulation System-Maritime, and implementation of distributed gaming capability for war games and Fleet Battle Experiments.</li> <li>- (U) (\$0.120) Provide for selected NWC students to conduct advanced research projects.</li> </ul>										

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EXHIBIT R-2a, RDT&E Budget Item Justification		DATE: <b>February 2002</b>
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N BA-6</b>	PROGRAM ELEMENT NUMBER AND NAME 0605853N/Management, Technical and International Spt	PROJECT NUMBER AND NAME R1767 Naval War College/Center for Naval Warfare Studies
<p>B. (U) OTHER PROGRAM FUNDING SUMMARY: Not applicable.</p> <p>(U) RELATED RDT&amp;E: Not applicable.</p> <p>C. (U) ACQUISITION STRATEGY: Not applicable.</p> <p>D. (U) SCHEDULE PROFILE: Not applicable.</p>		

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EXHIBIT R-2a, RDT&E Budget Item Justification							DATE: <b>February 2002</b>			
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME				PROJECT NUMBER AND NAME					
<b>RDT&amp;E, N BA-6</b>	0605853N/Management, Technical and International Spt				X2221 Assessment Program					
COST (\$ in Millions)		FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Project Cost		<b>14.219</b>	<b>11.496</b>	<b>12.800</b>	<b>13.228</b>	<b>13.466</b>	<b>13.744</b>	<b>14.054</b>	<b>CONT</b>	<b>CONT</b>
RDT&E Articles Qty										
<p>(U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: Project X2221, Assessment Program, provides analytical and management support to the Planning segment of the Navy Planning, Programming and Budgeting System (PPBS). This project supports the development of annual Integrated Warfare Architectures (IWARs) and Chief of Naval Operations Program Analysis Memoranda (CPAM) assessments, which provide analytical underpinnings/basis for programmatic decisions of the Navy's top leadership regarding the integration of all Navy warfare and support requirements. This program provides the Navy input to the Vice Chairman Joint Chiefs of Staff (VCJCS) led Joint Warfighting Capability Assessment (JWCA) process. Assessment program develops tools and analytical methodologies that assist in evaluating Navy programs and provides technical leadership for the analysis functional area of Naval Modeling and Simulation.</p> <p>(U) PROGRAM ACCOMPLISHMENTS AND PLAN:</p> <p>(U) FY 2001 ACCOMPLISHMENTS:</p> <ul style="list-style-type: none"> <li>- (U) (\$0.212) Developed, updated and maintained detailed level Navy Standard scenarios based on Defense Planning Guidance.</li> <li>- (U) (\$9.293) Developed Integrated Warfare Architectures (IWARs) and performed assessments and developed the Chief of Naval Operations Program Analysis Memoranda (CPAM). Areas of focus included Air Dominance; Deterrence; Force Structure; Infrastructure; Manpower and Personnel; Training and Education; Power Projection; Readiness; Sea Dominance; Sensor Management/Information Superiority; Sustainment; Technology. Provided Navy input to Joint Warfighting Capabilities Assessment (JWCA) process.</li> <li>- (U) (\$2.062) Continued to develop and accredit IWAR and CPAM tool and improve analytic methodology.</li> <li>- (U) (\$1.692) Using the standard simulation and database architecture developed by Navy Modeling and Simulation to re-host legacy models into the new framework, vastly improved the utility of these tools to the assessment process. Developed new tools that utilize models in the standard simulation and database architecture. Coordinated/support Joint Analytical Model Improvement Program (JAMIP).</li> <li>- (U) (\$0.960) In response to ASN (RD&amp;A)'s request, developed the Resource Allocation Decision Support System (RADSS) into a fully operational decision support system for use across Department of the Navy (DON) Expanded the scope of the database and developed a fully operational, web-based RADSS that provides ASN (RD&amp;A) and OPNAV with analytical and management tools for the planning/assessment process.</li> </ul>										

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EXHIBIT R-2a, RDT&E Budget Item Justification		DATE: <b>February 2002</b>
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N BA-6</b>	PROGRAM ELEMENT NUMBER AND NAME 0605853N/Management, Technical and International Spt	PROJECT NUMBER AND NAME X2221 Assessment Program
<p>(U) FY 2002 PLAN:</p> <ul style="list-style-type: none"> <li>- (U) (\$0.218) Develop, update and maintain detailed level Navy Standard scenarios based on Defense Planning Guidance. Develop of Alternative Scenarios in Support of QDR, Joint Studies, and Navy Resource Analyses.</li> <li>- (U) (\$7.991) Continued Integrated Warfare Architectures (IWARs) support and perform assessments and develop the Chief of Naval Operations Program Analysis Memoranda (CPAM). Areas of focus include Air Dominance; Deterrence; Force Structure; Infrastructure; Manpower and Personnel; Training and Education; Power Projection; Readiness; Sea Dominance; Sensor Management/Information Superiority; Sustainment; Technology. Provide Navy input to Joint Warfighting Capabilities Assessment (JWCA) and Joint Requirement Oversight Council (JROC) processes.</li> <li>- (U) (\$1.805) Continue to develop and accredit IWAR and CPAM tool and improve analytic methodology. Continued support for Alternatives of Analysis (AOA) Support and Oversight. Support for the Chairman's Program Recommendation (CPR) and Chairman's Program Assessment (CPA).</li> <li>- (U) (\$1.482) Using the standard simulation and database architecture developed by Navy Modeling and Simulation to re-host legacy models into the new framework, vastly improving the utility of these tools to the assessment process. Continue to develop new tools that utilize models in the standard simulation and database architecture. Coordinate/support Joint Analytical Model Improvement Program (JAMIP).</li> </ul> <p>(U) FY 2003 PLAN:</p> <ul style="list-style-type: none"> <li>- (U) (\$0.225) Continue to develop and maintain detailed level Navy Standard scenarios based on Defense Planning Guidance. Develop and evaluate alternative scenarios.</li> <li>- (U) (\$8.764) Supports Integrated Warfare Architecture (IWARs) and perform assessments and develop the Chief of Naval Operations Program Analysis Memoranda (CPAM). Areas of focus include Air Dominance; Force Structure; Infrastructure; Manpower and Personnel; Training and Education; Power Projection; Readiness; Sea Dominance; Sensor Management/Information Interoperability key performer parameters. Provide Navy input to Joint Warfighting Capabilities Assessment and Joint Requirement Oversight Council (JROC) (JWCA) processes.</li> <li>- (U) (\$2.188) Continue to develop and accredit IWAR and CPAM tool and improve analytic methodology.</li> <li>- (U) (\$1.623) Applying the standard simulation and database architecture developed by Navy Modeling and Simulation to re-host legacy models into the new framework, vastly improving the utility of these tools to the assessment process. Continue to develop new tools that utilize Models in the standard simulation and database architecture. Coordinate/support Joint Analytical Model Improvement Program (JAMIP).</li> </ul> <p>B. (U) OTHER PROGRAM FUNDING SUMMARY: Not Applicable</p> <p>C. (U) ACQUISITION STRATEGY: Not Applicable</p> <p>D. (U) SCHEDULE PROFILE: Not Applicable</p>		

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